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Letter by Mahajan Regarding Article, "A Narrow QRS Complex Tachycardia With Apparently Concentric Retrograde Atrial Activation Sequence"

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Arias et al in the article 'A Narrow QRS Complex Tachycardia with an Apparently Concentric Retrograde Atrial Activation Sequence' describe a case with spontaneous intra atrial block along the mitral isthmus to explain the change in atrial activation [1]. This phenomenon has been described during radiofrequency ablation while ablating along the lateral mitral annulus for a left free wall pathway [2-4]. We have two points to make. First, in figure 1 CS 3-4 has a good A but hardly any V. Thus, in the absence of a contrast injection showing that the CS 3-4 was actually at the CS os and not outside into the atrium, there remains a possibility that CS 3-4 was protruding out of the CS into the atrium giving a mistaken impression of concentric activation. Pushing the catheter further into the CS would have confirmed this. Secondly, a change in activation can often be due to the presence of another tachycardia. To ascribe the change in activation to a mitral isthmus block, we must show that the tachycardia cycle length and VA HIS remained the same. Also, only if the concentric activation is persisting, the final successful ablating site at the lateral mitral isthmus having the earliest A confirms that the block at the mitral isthmus was a cause of concentric activation. Further more pushing the CS catheter further into the CS during the time of apparent concentric activation would have confirmed the cause. If the CS 3-4 was out of the CS, the deeper insertion would have made the activation eccentric. If spontaneous isthmus block was actually there, then presence of double potentials along the line of block with sudden change in activation beyond it would have confirmed it.

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